

CLAIMS:

1. A method of synthesizing a first and a second output signal from an input signal, the method comprising:
 - filtering the input signal to generate a filtered signal;
 - obtaining a correlation parameter indicative of a desired correlation between
 - 5 the first and second output signals;
 - obtaining a level parameter indicative of a desired level difference between the first and second output signals; and
 - transforming the input signal and the filtered signal by a matrixing operation into the first and second output signals, where the matrixing operation depends on the
 - 10 correlation parameter and the level parameter.
2. A method according to claim 1, wherein the matrixing operation comprises a common rotation by a predetermined angle of the first and second output signals in a space spanned by the input signal and the filtered input signal; and where the predetermined angle
- 15 depends on the level parameter.
3. A method according to claim 2, wherein the predetermined angle is selected to maximize a total contribution of the input signal to the first and second output signals.
- 20 4. A method according to claim 1, further comprising scaling each of the first and second output signals to said desired level difference between the first and second output signals.
5. A method according to claim 1, wherein the filtering of the input signal
- 25 comprises all-pass filtering the input signal.
6. A method according to claim 5, wherein the all-pass filter comprises a frequency-dependant delay.

7. An arrangement for synthesizing a first and a second output signal from an input signal, the arrangement comprising:
filter means for filtering the input signal to generate a filtered signal;
means for obtaining a correlation parameter indicative of a desired correlation
5 between the first and second output signals;
means for obtaining a level parameter indicative of a desired level difference
between the first and second output signals;
means for transforming the input signal and the filtered signal by a matrixing
operation into the first and second output signals, where the matrixing operation depends on
10 the correlation parameter and the level parameter.
8. An apparatus for supplying a decoded audio signal, the apparatus comprising
an input unit for receiving an encoded audio signal;
a decoder for decoding the encoded audio signal, the decoder comprising an
15 arrangement for synthesizing a first and a second audio signal according to claim 7; and
an output unit for providing the decoded first and second audio signal.
9. A decoded multi-channel signal comprising a first and a second signal
component synthesized from an input signal by transforming the input signal and a filtered
20 signal by a matrixing operation into the first and second signal components, where the
filtered signal is generated by filtering the input signal, and where the matrixing operation
depends on a correlation parameter indicative of a desired correlation between the first and
second output signals and on a level parameter indicative of a desired level difference
between the first and second output signals.
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10. A storage medium having stored thereon a decoded multi-channel signal
according to claim 9.